

ROSEMOUNT DIAPHRAGM SEAL SYSTEMS

A complete line of transmitters and diaphragm seals made to work together

Fully integrated products, designed and manufactured by Emerson

Rosemount™ Diaphragm Seal Systems offer protection to transmitters, guarding against hot and cold, corrosive or erosive processes. This seal system features a variety of solutions, including industry-specific seals for difficult processes. This safety certified system does not require mounting hardware and can be used for many pressure measurement applications, providing reliable, remote measurements.



Rosemount Electronic Remote Sensor (ERS™) System

Engineered with flexible, digital architecture, the ERS System calculates differential pressure electronically using two pressure sensors linked together with an electrical cable. Easy to install, this safety-certified system is engineered for faster response time than traditional systems, providing you with exceptional performance in a wide range of applications.

Rosemount Tuned System

Rosemount Tuned-System Assemblies utilize a direct mount seal on the high pressure connection and a remote mount (Capillary) connection on the low pressure connection. Save time and cost during installation by eliminating additional transmitter mounting components. A great solution for applications with short spans and high pressures.



Rosemount Balanced Seal System

Traditional balanced systems utilize two identical diaphragm seals with remote mounted (capillary) connections. Eliminates the maintenance concerns of wet or dry legs and are good for horizontal flow and indoor applications with little to no temperature variations.



Rosemount Single Seal System

Direct- and remote-mount connections are engineered to meet your measurement needs. They offer simple installation for mounting transmitters directly to the vessel or remotely, eliminating the need for additional transmitter mounting provisions.


- Fully assembled, leak tested and calibrated level measurement systems
- Warranty includes remote seal (3051S Ultra offers 15-year warranty)
- Published performance and software for comprehensive performance calculations
- All Welded connections available



ROSEMOUNT DIAPHRAGM SEAL SYSTEMS

Rosemount Diaphragm Seals Provide Best in Class Accuracy and Performance

- Emerson designs for global consistency and quality
- 36 seal styles in several ratings and sizes, 18 diaphragm materials, 4 diaphragm coatings
- Flexibility through specials for specific requirements



Recessed Diaphragm

Prevents Damage

- Provides protection against diaphragm damage during installation
- Minimizes potential for gasket induced errors

Back-up Convolutions

Improves Performance

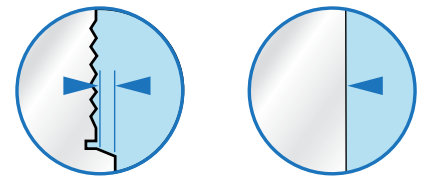
- Minimized temperature effect due to lower fill fluid volume
- Sustained diaphragm integrity in extreme conditions with minimal fill fluid

Gasket Area

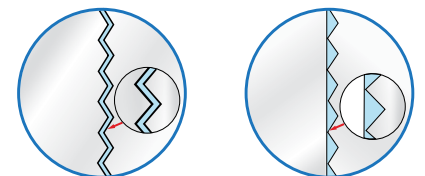
Corrosion Protection

- Gasket Area is the same material as diaphragm material
- Diaphragms available in 18 materials, and 4 coatings

Recessed Diaphragm Traditional Diaphragm



Backup Convolutions Traditional Approach



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